

REQUEST FOR QUALIFICATIONS
Geomorphic Assessment, Restoration Plan and Conceptual Engineering
Design for the Protection of the Campton Village Water Precinct
Infrastructure on the Mad River - Campton, NH

June 4, 2015



North Country Council
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TABLE OF CONTENTS

REQUEST FOR QUALIFICATIONS

I.	DESIRED QUALIFICATIONS	3
II.	REQUIRED QUALIFICATIONS SUBMISSIONS	3
III.	PROJECT TEAM AND LEVEL OF PARTICIPATION	4
IV.	PROJECT APPROACH/SCOPE OF WORK	4
V.	PROJECT SCHEDULE	4
VI.	SELECTION CRITERIA	5
VII.	REQUEST FOR QUALIFICATIONS (RFQ) QUESTIONS	5
VIII.	TIME LINE	6
IX.	DISCLAIMER	6

ATTACHMENT I - SCOPE OF WORK GUIDANCE

Project Location and Watershed Characteristics	7
River and Watershed Quality Conditions and Goals	7
Project Outline	8
Geographic Extent	9

REQUEST FOR QUALIFICATIONS

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I. DESIRED QUALIFICATIONS

Respondents should demonstrate their capabilities for relevant services in the Northeastern U.S. with a focus on New England river and stream systems. The North Country Council and their project partners seek vendors that have a strong understanding of the underlying principles of fluvial erosion and river restoration, and at least five years of experience demonstrating these capabilities. Specific desired qualifications include:

- An understanding of river processes and the application of fluvial geomorphology and restoration principles
- An understanding of water supply infrastructure and water supply protection
- An understanding of river engineering in the context of fluvial geomorphology and ecology, and the application of engineering services to river and stream restoration
- Experience developing restoration plans and conceptual engineering designs for river restoration projects (e.g. channel design, streambank stabilization, bioengineering)
- Experience with hydraulic and hydrologic analysis and modeling
- Experience conducting sediment management analysis (both quality and quantity)
- Successful preparation of federal and state permit applications and approvals, and associated plans for river-related projects
- Experience with Section 106 requirements as they relate to river restoration projects in New Hampshire
- Experience providing effective presentation of complex and sometimes controversial information to the public
- A demonstrated ability to meet project goals within the projected timeline

II. REQUIRED QUALIFICATIONS SUBMISSIONS

Each consultant will submit a qualifications package to North Country Council in PDF format. Hard copy submittals will not be accepted. Qualification packages will be submitted to North Country Council by email to TBamford@NCCouncil.org and include the following components as described in detail below:

- Cover letter indicating a primary contact for the qualifications package and that person's title, address, phone number, and email address. The cover letter should note the states in which the respondent is able to render services, and include relevant professional certifications (e.g., Professional Engineer, Certified Wetland Scientist, Certified Floodplain Manager, etc.)
- Description of the respondent's general approach (i.e., "philosophy") to river restoration, skills and specialties for which the respondent is qualified, and a summary of directly-relevant work experience of the respondent. Responses must address how the respondent meets the desired qualifications outlined above; please consult Section VI - SELECTION CRITERIA (below) for additional guidance.

- List of references including names, titles, contact information. These will preferably be clients for whom similar work has been performed within the past five (5) years.
- The project team, including project team organization, team member qualifications and the anticipated level of involvement of key team members in each phase of the project as described in the project approach and scope of work.
- Project reference pages, including a summary of the project, the specific role of the respondent in the project, and representative photographs.
- A technical proposal that describes the team's project approach and scope of work.
- A proposed project schedule.
- A Task Table that includes the following elements:
 - Brief description of each task
 - Proposed completion dates of each task

Complete and timely submittal of all required documents is required for the qualifications package to be considered.

Each respondent will submit one PDF version of their qualifications package by close of business (5:00 PM) on, July 13, 2015 to:

Tara Bamford, Planning Coordinator
North Country Council
TBamford@NCCouncil.org

After the quality-based ranking is complete, the first ranked consultant will provide a task based cost proposal, and North Country Council will proceed with contract negotiations with that consultant. If these negotiations are not successful, North Country Council will negotiate with the second ranked consultant, etc. until a contract has been successfully negotiated.

III. PROJECT TEAM AND LEVEL OF PARTICIPATION

The qualifications package will identify the individuals responsible for managing the project and conducting specific project tasks. The qualifications package will also estimate the expected level of participation in the project tasks and in the overall project. An organization chart showing lines of communication and decision-making hierarchy will be included in the qualifications package.

IV. PROJECT APPROACH/SCOPE OF WORK

The technical qualifications package must contain the elements contained in Attachment I. Attachment I contains a Scope of Work Guidance to assist in the development of the project approach/scope of work. It must be clear on how all these elements will be addressed and also how public participation and interaction with the various stakeholders will occur.

V. PROJECT SCHEDULE

The respondents will provide a schedule to conduct and complete the project. The schedule will include project tasks as identified in the Scope of Work. Project tasks will be laid out in a flow chart identifying the anticipated days to complete each task and the interrelationship of conducting and completing these tasks.

VI. SELECTION CRITERIA

Selection will be based on the qualifications package. Respondents will be assessed based on the following criteria.

1. *Specialized Experience of the Project Team* (40 Percent)

The respondent will be rated on:

- (a) their specialized experience directly relating to fluvial erosion and river restoration
- (b) development of fluvial erosion and river restoration plans
- (c) development and implementation of fluvial erosion and river restoration projects in New England
- (d) Demonstration of past project experience and success

2. *Project Personnel* (20 Percent)

The respondent will be rated on the principal team members' role and participation level, and the qualifications and experience of key personnel, and availability during the project.

3. *Project Approach* (20 Percent)

The respondent will be rated on the approach to the project scope outlined in this RFQ, the understanding of the project scope and schedule of work and the interfacing of tasks.

4. *Project Management* (20 Percent)

- (a) demonstrated ability to complete the work within the required schedule and budget
- (b) project management effectiveness
- (c) demonstrated ability to effectively solicit, assess, and use comments and suggestions from stakeholders during project development
- (d) Demonstration of successful cooperation with local, state and federal agencies

VII. REQUEST FOR QUALIFICATIONS (RFQ) QUESTIONS

North Country Council and project partners will not respond to telephone questions about the RFQ. Questions concerning this RFQ must be submitted via email to Tara Bamford, Planning Coordinator, North Country Council at:

TBamford@NCCouncil.org

Questions must be submitted by 5:00pm ET on June 18, 2015, and must have the Subject Line: "Campton RFQ Question". If you have a question, please follow this procedure so as to ensure consistency of answers. Any information obtained by speaking one-on-one with a project partner is not considered an official response for the purposes of this process.

A digest version of all questions and answers will be posted on-line at NCCouncil.org on the Campton Water District project page on June 25, 2015.

Upon completion of ranking qualifications packages, North Country Council, in consultation with the project team will negotiate with the top-ranked firm for contract scope and price. The negotiated contract will be based on fair and reasonable compensation for the services required.

VIII. TIME LINE

June 4, 2015	RFQ Release
June 18, 2015	Deadline for submittal of questions on RFQ (5:00pm ET)
June 25, 2015	Q&A Digest posted
July 13, 2015	Deadline for receipt of responses to RFQ (5:00pm ET)
July 31, 2015	Final selection of contractor and notification (anticipated) to all firms

IX. DISCLAIMER

This Request for Qualifications does not commit North Country Council to award a contract or pay any costs incurred during the preparation of the qualifications package. North Country Council reserves the right to reject any or all of the proposals for completing this work. North Country Council also reserves the right to eliminate the need for the selected firm to complete one or more tasks, pending the outcome of preceding related tasks or issues.

ATTACHMENT I - SCOPE OF WORK GUIDANCE

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Project Location and Watershed Characteristics

The Mad River watershed receives drainage from the White Mountains in the Waterville Valley region before flowing south and west through Campton Upper and Lower Village where it eventually flows under Interstate 93 to the confluence with the Pemigewasset River. The upper portions of the watershed are primarily forested due to the protective boundaries of the White Mountain National Forest. The lower reaches of the watershed in Campton are more developed with both agricultural, commercial, transportation, and residential land use. The upper watershed is characterized by steep slopes, rapid runoff, and steep to moderate channel slopes. The remainder of the watershed is lower gradient with a meandering river channel that courses through the ancient floodplain valley of the Pemigewasset River.

River and Watershed Quality Conditions and Goals

The reach of the Mad River that flows through Campton Village and contains the Campton Village Water Precinct wellheads has been identified as not supporting or marginally supporting the Aquatic Life Use Designation for New Hampshire surface waters. According to the DRAFT 2012, 305(b) / 303(d) Watershed Report Card; “Impacts from Hydrostructure Flow Regulation/modification” have been identified as the source of non-attainment along this reach of river (Assessment Unit ID = NHRIV700010401-17). The impacts can be traced back to river diversions, impoundments, and gravel extraction that caused the Mad River to abandon the primary channel, develop secondary channels, occupy sand and gravel pits, relocate across the floodplain, and move and deposit large volumes of sand, gravel, and other materials throughout the lower reaches of the watershed over the last fifty years.

The legacy of anthropogenic changes in the Mad River watershed now threatens the integrity and quality of the Campton Village Water District wellheads and distribution system. The continued channel migration, sediment deposition, and erosion of bank and bed materials now jeopardizes the supply and quality of water to six hundred Campton residents currently served by this system. Action needs to be taken in order to find a solution that will allow the Mad River to function as a natural river system with an active floodplain while allowing the integrity and function of the public water distribution system to remain active.

The Campton Village Water Precinct previously applied for and received an emergency permit from the New Hampshire Department of Environmental Services (DES) for a Wetlands Permit to install bank stabilization materials along the outside meander bend of the Mad River to protect the access road to these wells. The project team is now seeking a more watershed-based assessment of the Mad River that will take into account the drainage area, channel dimensions, and predicted evolution of the channel migration throughout this reach in order to develop a river restoration plan that will not only address the existing impairments as documented by DES, but to protect the integrity of the Precinct wells.

North Country Council, with funding from the Campton Village Water District and an EPA 604(b) grant provided by DES, intends to secure the services of a fluvial geomorphologist or a firm that specializes in

river science to conduct a fluvial geomorphology-based assessment of the Mad River similar to the plans completed for the Upper Connecticut River tributaries, the Lower Mohawk River, the Suncook River, McQuesten Brook, Nash Stream, and the Pemigewasset River that have been developed and implemented. The future availability of state and federal funding often depends upon the development of watershed and geomorphology-based plans before implementation phases can be considered for competitive funding opportunities. This project is to generate such a plan as the basis for future implementation of the restoration, infrastructure protection, and river management recommendations contained within it. Completion of this project will not only benefit the drinking water supply system for the Campton Village District, but also put this reach of the Mad River back onto a channel evolution course that is not entirely dictated by historic actions of development pressures within the region. Ultimately, it is hoped that the Mad River could potentially be de-listed from the 305(b) / 303(d) list similar to the successful Pemigewasset River Restoration Project in Woodstock that generated a Nonpoint Source Success Story for New Hampshire and the U.S. Environmental Protection Agency.

Project Outline

An accepted methodology must be followed to generate a fluvial geomorphological assessment and recommended list of restoration actions. The development of the Mad River Geomorphic Assessment Plan should attempt to emulate the approaches taken in the Upper Connecticut River watershed, Nash Stream, McQuesten Brook, and Pemigewasset River watershed since those plans have led to successful implementation phases with Watershed Assistance Grant funding provided through Section 319 of the Clean Water Act as administered by DES. Variations from this methodology should be explained. The steps should include:

1. Develop a Site Specific Project Plan (SSPP) for approval by the project team comprised of North Country Council, DES, and Campton Water District that references the Stream Morphology Programmatic Quality Assurance Project Plan on file with DES.
2. Facilitate a public meeting to announce project scope, introduce consulting team, provide opportunity for input, and to identify any missing stakeholders that should be invited to participate
3. Perform Phase 1 geomorphic data analyses on the project length, inclusive of digitization of the stream centerline to the 1:5000 scale, reach breaks, valley walls, meander centerline, watershed conditions controlling channel morphology, and subwatershed delineation. Conduct archival information research, mapping, review photos, etc. Consult with the DES Geological Survey and have Phase 1 work products reviewed and quality control checked before beginning Phase 2 assessments in the watershed.
4. Complete Phase 2 Fluvial Geomorphology assessment for the Mad River project length, using the New Hampshire implementation of the Vermont Phase 2 geomorphic assessment protocols, including bridge and culvert survey, surveying of channel dimensions, substrate analysis, rapid geomorphic assessment, rapid habitat assessment, database entries, spreadsheets, and fluvial erosion hazard zones. Collaborate with DES Geological Survey personnel to ensure that protocols and work products meet DES quality assurance standards and data acquisition requirements.
5. Collect and analyze additional fluvial geomorphology data on river and floodplain features in the vicinity of the Campton Village Precinct property, than can have potential impact upon infrastructure. Submit final plots generated from pebble counts, total station surveys, cross-sections, and longitudinal surveys. Consult with DES Geological Survey relative to work products and secure quality control approval.
6. Interpret and synthesize final geomorphology data into a fluvial geomorphology-based restoration/stabilization report.

7. Present conceptual engineering designs and options for implementation to project team for review and comment. Incorporate project team edits to conceptual designs and generate final work products.
6. Present findings and recommendations at public meeting to present draft plans to public for review and comment.
7. Develop final plan and report.

Geographic Extent

Mad River in Campton, N.H. from the confluence with the Pemigewasset River to a point 1.8 miles upstream, or the point at which NH Route 49 begins to parallel the Mad River.